The Influence of Corporate Social Responsibility Disclosure, Leverage, Sales Growth, and Industry Type on Profitability in Manufacturing Companies Listed at Indonesia Stock Exchange

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CSR Disclosure, Leverage, Sales Growth, Industry Type, Return On Asset.

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M48, G39.

Abstract  
This research aims to examine the influence of corporate social responsibility disclosure, leverage, sales growth, and industry type on firm’s profitability which was measured by return on asset (ROA). The population in this research are manufacturing companies listed in Indonesia Stock Exchange period 2013 – 2016. This is a quantitative research which the data are analyzed by using panel data regression method. The result of this research show that corporate social responsibility disclosure (CSRD), leverage, sales growth, and industry type have a positive and significant effect on return on asset (ROA).
1. Introduction
Manufacturing companies listed on the Indonesia Stock Exchange (IDX) are industrial companies that have an important role in economic progress in Indonesia because of their role in producing a product. Companies must have good management and performance to survive in the increasingly competitive business world. The company must be managed effectively and efficiently to be able to provide large profits for internal companies and external companies. Profitability is one of the measuring tools to see the company's success in business, starting from valuation of assets, debt, liquidity, and others. Profitability values indicate how well the company runs its operational activities (Xu et al. 2014). For long-term investors, profitability ratios can be used to see profits that will actually be received in the form of dividends (Mithas and Tafti, 2012). The company's ability to generate profits in its operations (profitability) is the main focus in assessing the company's performance because the company's profit is not only an indicator of the company's ability to fulfill its obligations for its funders, it is also an element in the creation of corporate value that shows the company's prospects in the future, so it can used as a basis for investment decisions to measure the company's ability to generate a rate of return on investments made.

There are several factors that can affect profitability, including corporate social responsibility disclosure (CSRD) which is a responsibility of the company for shareholders and other stakeholders such as employees, customers, government, society and the environment. CSRD can be used as an indicator to see the company's ability to effectively meet the needs of stakeholders. CSRD is a communication between managers and stakeholders. With CSR disclosure by a company, it will be a special consideration for investors to invest their funds, so that will affect the changes in company's profitability (Kanwal et al. 2013).

Besides CSRD, leverage and the level of company growth (sales growth) can also affect the profitability of the company. The level of leverage by the company reflects the amount of debt used by the company to carry out its operational activities. The increase and decrease in the level of debt has an influence on the profitability of the company (Nor and Noriza, 2012). Successful use of debt will increase the income of the owner of the company because
taking this fund exceeds the interest expense that must be paid by the company and becomes the right of ownership, which means increasing the owner’s equity. Chandrakumarmangalam and Govindasamy (2010) stated that shareholder wealth will be maximized when the company is able to use more debt. The company's growth rate (sales growth) can also affect how much the company's profits will be obtained. Large companies are more desirable than small companies so that the company's growth greatly influences the company's profit and value (Memon et al. 2012). Sales growth (sales growth) is highly expected by internal and external companies, because companies with good growth show that companies are able to develop and generate funds well. In general, fast growing companies will get positive results which means that the company is able to compete, enjoying sales that increase significantly and accompanied by an increase in market share. So that if the company's sales level increases, it will increase the profitability of the company.

Company’s profitability can be influenced by the type of industry, where each industry has different characteristics and risk levels. Industrial type analysis is one of the important steps that investors must take before making a decision to invest, because industry analysis can help investors to identify investment opportunities in the industry. Industrial type measures how large the company's operational scope. Dkhili and Ansi (2012) stated that the type of industry has an influence on the profitability of a company. Investors will be more interested in companies with large operational scope.

This study contributes to provide empirical evidence about the impact of Corporate Social Responsibility Disclosure, Leverage, Sales Growth, and Industrial Type on Profitability. The choice of ROA as a proxy of profitability because ROA is considered appropriate in reflecting the company's performance in generating profits from its total assets.

2. Literature Review and Hypotheses

CSR Disclosure and Profitability

CSR Disclosure can be a control to influence stakeholder’s opinion about achieving corporate obligations. Stakeholders want entities to include their expectations into company’s behavior. Failing to communicate the entity's CSR can lead to the termination of support
from stakeholders and the consequences will continue on the profits that the company receives (Ofori et al. 2014). Based on stakeholder theory there is a positive relationship between corporate social responsibility disclosure (CSRD) and company’s profitability. The reason is the satisfaction of various stakeholder groups can be a tool to increase organizational profit (Saleh et al., 2010). Siddiq and Javed (2014), the success of a company depends on its ability to balance various interests of the stakeholders. CSRD requires companies to be accountable to stakeholders and report on accountability that has been carried out by the company. CSRD is considered capable of increasing corporate profits because it can reduce conflicts of interest between managers, shareholders, and stakeholders. Based on the description above, the proposed hypothesis is as follows:

H₁: CSR disclosure positively influences return on assets (ROA).

Leverage and Profitability

Leverage policy is a method used by managers to obtain funding from outside the company (external) for the survival of the company's operations. Leverage policy will increase interest but reduce the tax burden because of the greater tax protection. This is taken into account by managers in deciding policies to maximize profits. Successful use of debt will increase the income of the owner of the company because taking this fund exceeds the interest expense that must be paid by the company and becomes the right of ownership, which means increasing owner's equity (Gweyi et al. 2014). Based on the description above, the proposed hypothesis is as follows:

H₂: Leverage positively influences return on assets (ROA).

Sales Growth and Profitability

Sales growth is highly expected by internal and external companies, because good growth signals the development of the company. In general, companies that are growing rapidly get positive results in the sense of consolidating the position of competition, enjoying sales that increase significantly and accompanied by an increase in market share. Thus, companies that have high sales growth tend to be able to generate funds better over time. So if the company's sales level increases, it will increase the profitability of the company.
company (Yazdanfar, 2013). Based on the description above, the proposed hypothesis is as follows:

\[ \text{H}_3: \text{Sales growth positively influences return on asset (ROA).} \]

**Industry Type and Profitability**

Industry analysis is one of the important stages that must be done by investors before making a decision to invest, because industry analysis can help investors to identify investment opportunities in the industry (Tandelilin, 2010). The industry type includes high profile and low profile industries, where the high profile industry has a large industry scope than low profile industry. The greater the operational area of the company, the higher the profit gained (Bayoud, Kavanagh, and Slaughter, 2012). Based on the description above, the proposed hypothesis is as follows:

\[ \text{H}_4: \text{Industry type positively influences returns on asset (ROA).} \]

**3. Methodology**

The population of this research is all of the manufacturing corporations listed in Indonesia Stock Exchange period 2013-2016. The total sample of this research are 66 companies selected by purposive sampling method. This is a quantitative research which the data are analyzed by using panel data regression method. The data was sourced from the annual report of the manufacturing companies. The model formulated to test the research hypothesis is:

\[
\text{ROA}_{it} = \alpha + \beta_1\text{CSRI}_{it} + \beta_2\text{LEV}_{it} + \beta_3\text{GROW}_{it} + \beta_4\text{PROFILE}_{it} + e
\]

**Description:**

- \( \text{ROA} \) = Return on Asset
- \( \alpha \) = Constant
- \( \beta_1 - \beta_4 \) = Regression coefficient
- \( i \) = entity \( i \)
- \( t \) = period \( t \)
- \( \text{CSRI} \) = Corporate Social Responsibility index
- \( \text{LEV} \) = Leverage
- \( \text{GROW} \) = Sales growth
PROFILE = Industry types (profile)  
e = Error term

Research Variables

Dependent Variable:
1. Return on Assets (ROA)
   ROA calculation according to Fahmi (2017) is:
   \[
   \text{ROA} = \frac{\text{Earning After Interest And Tax}}{\text{Total Asset}}
   \]

Independent Variables
1. Corporate Social Responsibility Disclosure (CSRD)
   Companies that implement and disclose CSR items that exist in the financial statements or the sustainability report is numbered 1, while there is no disclosure of CSR given the number 0. Measurements then done using the CSR Index (CSRI) from GRI G4. CSRI formulated as follows:
   \[
   \text{CSRDI}_{ij} = \frac{\sum \text{X}_{ij}}{\text{N}_{j}}
   \]

   Description:
   - \text{CSRDI}_{ij} : Corporate social responsibility disclosure index of \( j \) firm
   - \text{N}_{j} : The number of items for the \( j \) firm (91 items of GRI G4)
   - \text{X}_{ij} : Dummy variable, 1 = if the item is disclosed, 0 = if the item is not disclosed

2. Leverage
   Calculation method formulated by Kasmir (2016) is:
   \[
   \text{Leverage} = \frac{\text{Total Liabilities}}{\text{Total Asset}}
   \]
3. Sales Growth

Sales growth calculation according to Fahmi (2017) is:

\[
\text{Growth} = \frac{\text{Sales (t)} - \text{Sales (t-1)}}{\text{Sales (t-1)}}
\]

4. Industry type

The measurement of Industry type variable according to Hackston & Milne (1996). Companies with category high profile given the number 1, and companies with category low profile given the number 0.

Results and Discussion

Descriptive statistics

Summary of descriptive statistic results for the variables in this research as presented in Table 1 below:

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>CSR</th>
<th>LEV</th>
<th>GROW</th>
<th>PROFILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.080617</td>
<td>0.390379</td>
<td>0.409485</td>
<td>0.046936</td>
<td>0.833333</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.657000</td>
<td>0.850000</td>
<td>0.889000</td>
<td>0.720000</td>
<td>1.000000</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.161000</td>
<td>0.210000</td>
<td>0.000000</td>
<td>-0.749000</td>
<td>0.000000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.095146</td>
<td>0.105264</td>
<td>0.186501</td>
<td>0.159274</td>
<td>0.373386</td>
</tr>
<tr>
<td>Observations</td>
<td>264</td>
<td>264</td>
<td>264</td>
<td>264</td>
<td>264</td>
</tr>
</tbody>
</table>

Profitability proxied by return on assets (ROA) as the dependent variable in this study has a mean score of 0.080617 or 8% with a standard deviation of 0.095146. The maximum value of ROA for the firm is 0.657000 and minimum score of -0.161000.

Corporate Social Responsibility Index has a mean score of 0.390379 with a standard deviation of 0.105264. The maximum value of CSRD variable is 0.850000 and minimum
value of 0.210000. This reveals that the level of accountability of the sample company is very good.

Leverage has a mean value of 0.409485 with a standard deviation of 0.186501. The result also shows a minimum value of 0.000000 and maximum value of 0.889000. This explains that some firms use high level of debt to operate and run their activities and some others use very minimal level of debt and or consider low debt in financing their activities.

Sales growth has a mean value of 0.046936 with a standard deviation of 0.159274. The maximum value of sales growth is 0.720000 and a minimum of -0.749000. The existence of a negative minimum value of -74% is the presence of companies that have decreased sales during the observation period.

Industry type (profile) has a mean of 0.833333 or 83% with a standard deviation of 0.373386 or 73%. The minimum variable value is 0% and the maximum value is 1.000000 or 100%.

**Correlation Matrix**

Table 2 shows the correlations among the study variables. If the correlation values of this study's variables are less than the threshold value of 0.80 then there is no multicollinearity.

**Table 2: Correlation Matrix**

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>CSR</th>
<th>LEV</th>
<th>GROW</th>
<th>PROFIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1.000000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR</td>
<td>0.263624</td>
<td>1.000000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>0.412161</td>
<td>0.112577</td>
<td>1.000000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GROW</td>
<td>0.326762</td>
<td>-0.050195</td>
<td>-0.123940</td>
<td>1.000000</td>
<td></td>
</tr>
<tr>
<td>PROFIL</td>
<td>0.029558</td>
<td>0.041276</td>
<td>-0.105636</td>
<td>0.012597</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

The test results in Table 2 shows that all study's variables have correlation coefficient values < 0.80. It concludes that there is no multicollinearity problem exists between this study's variables.

**Best Model Selection Test**

The model estimation in panel data regression uses three approaches: common effect model, fixed effect model, and random effect model. To determine the best model, Chow-test and Hausman-test are conducted in this research.
At a significance level of 5%, the Chow-test show p-values of 0.000 < 0.05 so the fixed effect model is better used than the common effect model. The Hausman-test show p-value is 0.052 > 0.05 so the random effect model is better used than the fixed effect model. Based on the result of Chow-test and Hausman-test, it was concluded that the best model in this research using random effect model.

Table 4: Summary of Random Effect Regression Results for ROA

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-Statistics</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR Index</td>
<td>4.928616</td>
<td>5.201783</td>
<td>0.0000</td>
</tr>
<tr>
<td>Leverage</td>
<td>1.259219</td>
<td>2.777127</td>
<td>0.0059</td>
</tr>
<tr>
<td>Sales Growth</td>
<td>1.510651</td>
<td>3.451574</td>
<td>0.0007</td>
</tr>
<tr>
<td>Industrial Type</td>
<td>1.001798</td>
<td>2.910400</td>
<td>0.0039</td>
</tr>
<tr>
<td>C</td>
<td>-6.607030</td>
<td>-12.10052</td>
<td>0.0000</td>
</tr>
<tr>
<td>Adjusted R^2</td>
<td></td>
<td></td>
<td>0.1506</td>
</tr>
<tr>
<td>F-statistics</td>
<td>12.66046</td>
<td></td>
<td>0.0000</td>
</tr>
</tbody>
</table>

The Influence of Corporate Social Responsibility Disclosure on Profitability

As shown in Table 4, corporate social responsibility disclosure has a positive and significant effect on profitability as measured by ROA. CSRD has a positive coefficient of 4.928616 with p-value = 0.0000, which means first hypothesis (H_1) accepted. This result indicate that if there is a 1% increase, ROA will increase by a variable coefficient. The result of this research implies that the position of corporate social responsibility disclosure (CSRD) is an indicator that needs to be considered by the company's management in an effort to maximize revenue (profits) in manufacturing companies. CSR disclosure is a form of communication between the company and its stakeholders to get more support. CSRD is able to encourage trust on the shareholders to participate in company's development which then improve ROA. The result of this research is consistent with the research conducted by Afza et al. (2015), Angelia dan Suryaningsih (2015), Uadiale and Fagbemi (2012), dan Weshah et al. (2012), which states that CSRD has a
positive and significant effect on return on assets (ROA). However, the result of this study is different from the result of research conducted by Rahman, Rashid, and Haque (2014) which states that CSR expenditure does not have a significant effect on return on assets (ROA).

The Influence of Leverage on Profitability

The result of this study show that leverage has a positive and significant effect on return on assets (ROA). Regression test results show that leverage has a positive regression coefficient of 1.259219 with a significance value of 0.005, so that the result of this study accepted the second hypothesis ($H_2$). This reveals that if there is a 1% increase, ROA will increase by a variable coefficient. The result of this study implies that companies can carry out debt policy if they want to increase profits. Debt can be used as additional capital for companies to expand the company's operational activities. Debt is considered capable of providing additional capital for the expansion of the company's operations. Leverage policy will increase interest but reduce the tax expense because of the greater tax protection, so that can increase firm's profitability. This result is consistent with the result of research conducted by Gweyi and Karanja (2014), Kodongo, Makoteli, and Maina (2014) which states that the debt ratio has a positive and significant influence on the profitability of a company. However, this result is different from the result of research by Samarakoon et al. (2014) which states that there is a negative relationship between leverage on the company's profitability, when the debt ratio increases, it means that most of the company's assets are financed by long-term and short-term liabilities and therefore the return on assets and working capital used is reduced to meet payable obligations.

The Influence of Sales Growth on Profitability

The regression coefficient of the Sales Growth variable is 1.510651 with a significance level is smaller than 0.05, namely 0.000, which means that sales growth has a positive and significant relationship affecting return on assets (ROA). So that the result of this study accept the third hypothesis ($H_3$). The results of this study implies that the higher the sales growth, the more it will increase the return on assets (ROA) obtained by the company.
Companies that have high sales growth (sales growth) tend to be able to generate funds better over time. When the amount of goods sold by a company gets bigger, the average cost per product unit will be smaller so that the ROA generated by a company will increase. So that if the level of company sales increases, then the profitability of the company will increase. This result is in support with the findings of Yazdanfar (2013) which states that company growth has a significant positive effect on profitability. This finding is different with research by Mappanyuki et al. (2017) which concluded that sales growth has no significant effect on return on assets. Mohamad and Abdullah (2012) in his research stated that sales growth has a negative relationship on profitability.

The Influence of Industry Type on Profitability

Industry type can increase profitability at manufacturing companies in Indonesia Stock Exchange. Regression test results show that industry typeb variable has a positive regression coefficient of 1.001798 with a significance level is smaller than 0.05, namely 0.0107, So that the result of this study accept the fourth hypothesis (H4). This reveals that if there is a 1% increase, ROA will increase by a variable coefficient. Companies with the high profile type of industry will improve the return on assets (ROA), because high profile industry has a large operational scope so it is easier to get more confidence of the investors to make their investment decisions in company. This finding is consistent with a research conducted by Dkhili and Ansi (2012) and Vollono (2010), who examined the relationship between industry type and company profitability, and concluded that there is a positive relationship between industry type and company’s profitability.

Conclusions

The results of this study show that corporate social responsibility disclosure, leverage, sales growth, and type of industry have a positive and significant influence on the company's profitability. Based on the results of this study, the company's management needs to pay attention to the company's CSR disclosure, debt management, increase sales, and the optimal operational scope of the company in order to achieve the company's goals of increasing corporate's profit.
In addition, this study has limitation, this research uses only four independent variables. Further research is recommended to add other variables that can affect the profitability of the company.

References


Kanwal, Munaza, Farida Khanam, Shagufta Nasreen, and Shahid Hameed. 2013. “Impact of


